

WHAT IS CLAIMED IS:

1. Process for the preparation of an isoolefin polymer comprising repeating units derived from at least one divinyl aromatic monomer, comprising the
5 step of predicting the the content of unreacted vinyl groups from the aromatic monomer in the the polymer by means of FTIR measurements.
2. Process according to Claim 1, wherein the peak height at 988 cm^{-1} is analyzed.
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3. Process according to any of Claim 1, wherein following predicting the content of the unreacted vinyl groups form the aromatic monomer by FTIR measurements, changing one or more process parameters according to the result of the FTIR measurement.
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4. Process according to Claim 3, wherein one or more process parameters are changed to achieve a desired peroxide-induced curability of a raw polymer or its compound.
- 20 5. Process according to Claim 1, wherein the divinyl aromatic monomer is divinylbenzene.
6. Process according to Claim 1, comprising polymerizing isobutylene, isoprene, divinylbenzene and optionally additional copolymerizable
25 monomers.